CLAIMS:

1. An Asynchronous Transfer Mode (ATM) network of nodes operative to transmit data according to a packet communication protocol; the data includes packets and each packet is transmitted as a series of data cells; at least one of said nodes comprises one or more buffers for storing data cells routed to them and designated to be transmitted from the node; and any of said buffers is operative to perform at least the following –

while in an Absorbing State, to receive and store any cell routed to it and, further, when its fill level reaches a maximum level, to switch to a blocking state; and

while in said blocking state, to refrain from receiving and storing any cell and, further, when its fill level falls below a hysteresis level, lower than said maximum level, to switch to said absorbing state.

2. The network of claim 1 wherein the packet communication protocol is an Internet Protocol (IP).

3. The network of claim 1 wherein each data cell includes a Virtual Path Indicator (VPI) and wherein, at any node, any data cell is routed according to its VPI only.

4. The network of claim 1 wherein, at any node and for any buffer, said hysteresis level is determined according to some measure of the rate of total cells traffic routed to the buffer.

5. An Asynchronous Transfer Mode (ATM) platform operative to transmit data through an ATM node according to a packet communication protocol; the data includes packets and each packet is transmitted as a series of data cells; the platform comprises at least one buffer for storing data cells routed to it and designated to be transmitted from the node; and any of said buffers is operative to perform at least the following –

while in an absorbing state, to receive and store any cell routed to it and, further, when its fill level reaches a maximum level, to switch to a blocking state; and

while in said blocking state, to refrain from receiving and storing any cell and, further, when its fill level falls below a hysteresis level, lower than said maximum level, to switch to said absorbing state.

6. The platform of claim 5 wherein the packet communication protocol is an Internet Protocol (IP).

7. The platform of claim 5 wherein each cell includes a Virtual Path Indicator (VPI) and wherein any cell is routed to any buffer according to its VPI only.

8. The platform of claim 5 wherein, for any buffer, said Hysteresis Level is determined according to some measure of the rate of total cells traffic routed to the buffer.

9. In an Asynchronous Transfer Mode (ATM) network of nodes operative to transmit data according to a packet communication protocol, whereby the data includes packets and each packet is transmitted as a series of data cells, the network including, at one or more nodes, at least one buffer for storing data cells routed to them and designated to be transmitted from the node – a traffic management method, comprising, with respect to any of the buffers:

(i) causing the buffer, while in an absorbing state, to receive and store any cell routed to it and, further, when the buffer's fill level reaches a maximum level, to switch to a blocking state; and

(ii) causing the buffer, while in said blocking state, to refrain from receiving and storing any cell and, further, when the buffer's fill level falls below a hysteresis level, to switch to said absorbing state.

10. The method of claim 9, the packet communication protocol being an Internet Protocol (IP).

11. The method of claim 9, wherein each cell includes a Virtual Path Indicator (VPI), whereby, at any node, any cell is routed according to its VPI only.

12. The method of claim 9 whereby, at any node and for any buffer, said hysteresis level is determined according to some measure of the rate of total cells traffic routed to the buffer.

13. An Asynchronous Transfer Mode (ATM) platform, having at least one output port and being operative to transmit data according to a packet communication protocol; the data includes packets and each packet is transmitted as a series of data cells, each cell including a Virtual Path Indicator (VPI) and being routable to any of the output ports, at least some of the cells being routable according to their respective VPIs only; and

the platform is further operative to manage the flow of cells to at least one of the output ports, it being a managed port, so that, over any period of time during which the number of cells routed to the port exceeds the number of cells transmittable therefrom, the proportion of complete packets transmitted is substantially greater than if the flow were not thus managed.

14. The platform of claim 13, comprising a buffer, associated with any of said managed ports and serving to store cells designated to be transmitted therefrom, said buffer being operative to perform at least the following –

while in an absorbing state, to receive and store any cell routed to it and, further, when its fill level reaches a maximum level, to switch to a blocking state; and

while in said blocking state, to refrain from receiving and storing any cell and, further, when its fill level falls below a hysteresis level, lower than said maximum level, to switch to said absorbing state.

15. The platform of claim 14 whereby said hysteresis level is determined according to some measure of the rate of total cells traffic routed to the buffer.

16. The platform of claim 13 the packet communication protocol being an Internet Protocol (IP).

17. In an Asynchronous Transfer Mode (ATM) node equipment, having at least one output port and a buffer associated with each output port, the node being operative to transmit a plurality of input packet streams, according to a packet communication protocol, to any of the buffers, whereby each packet is transmitted as a series of data cells, cells corresponding to different packet streams being mutually interleaved –

a traffic management method, comprising, with respect to any of the buffers:

(i) ensuring that, while accepting input cells, the buffer has enough available capacity to store data of complete packets belonging to a substantial proportion of the input streams;

(ii) discarding all input cells as long as the buffer's available capacity falls short of enabling step (i).

18. The method of claim 17,

wherein step (i) includes for the buffer, while in an absorbing state, to receive and store any cell transmitted to it and, further, when its fill level reaches a maximum level, to switch to a blocking state;

and wherein step (ii) includes for the buffer, while in said blocking state, to refrain from receiving and storing any cell and, further, when its fill level falls below a hysteresis level, lower than said maximum level, to switch to said absorbing state.

19. The method of claim 17 wherein the packet communication protocol is an Internet Protocol (IP).

20. The method of claim 17 wherein each data cell includes a Virtual Path Indicator (VPI) and wherein any data cell is routed according to its VPI only.

21. The method of claim 17 wherein, for any buffer, said hysteresis level is determined according to some measure of the rate of total cells traffic routed to the buffer.

22. An Asynchronous Transfer Mode (ATM) node platform, having at least one output port and being operative to transmit a plurality of input packet streams, according to a packet communication protocol, to any of the ports, whereby each packet is transmitted as a series of data cells, cells corresponding to different packet streams being mutually interleaved, the platform comprising a buffer, associated with any of the output ports and being operative to accept input cells only while having enough available capacity to store data of complete packets belonging to a substantial number of input streams and to discard input cells otherwise.

23. The ATM platform of claim 22, wherein said buffer is further operative to perform at least the following –

while in an absorbing state, to receive and store any cell routed to it and, further, when its fill level reaches a maximum level, to switch to a blocking state; and

while in said blocking state, to refrain from receiving and storing any cell and, further, when its fill level falls below a hysteresis level, lower than said maximum level, to switch to said absorbing state.

24. The platform of claim 22 wherein said hysteresis level is determined according to some measure of the rate of total cells traffic transmitted to said buffer.

25. The platform of claim 22 the packet communication protocol being an Internet Protocol (IP).

26. The platform of claim 22 wherein each data cell includes a Virtual Path Indicator (VPI) and wherein any data cell is routed according to its VPI only.

27. In an Asynchronous Transfer Mode (ATM) network of nodes operative to transmit data according to a packet communication protocol, whereby the data includes packets and each packet is transmitted as a series of data cells, the network including, at one or more nodes, at least one buffer for storing data cells routed to them and designated to be transmitted from the node – a traffic management program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps, comprising, with respect to any of the buffers:

(i) causing the buffer, while in an absorbing state, to receive and store any cell routed to it and, further, when the buffer's fill level reaches a maximum level, to switch to a blocking state; and

(ii) causing the buffer, while in said blocking state, to refrain from receiving and storing any cell and, further, when the buffer's fill level falls below a hysteresis level, to switch to said absorbing state.

28. In an Asynchronous Transfer Mode (ATM) network of nodes operative to transmit data according to a packet communication protocol, whereby the data includes packets and each packet is transmitted as a series of data cells, the network including, at one or more nodes, at least one buffer for storing data cells routed to them and designated to be transmitted from the node – a traffic management computer program product comprising a computer useable medium having computer readable program code embodied therein, the computer program product comprising:

computer readable program code for causing the computer to cause the buffer, while in an absorbing state, to receive and store any cell routed to it and, further, when the buffer's fill level reaches a maximum level, to switch to a blocking state; and

computer readable program code for causing the computer to cause the buffer, while in said blocking state, to refrain from receiving and storing any cell

and, further, when the buffer's fill level falls below a hysteresis level, to switch to said absorbing state.